



I-93 Tri-Town Interchange Project

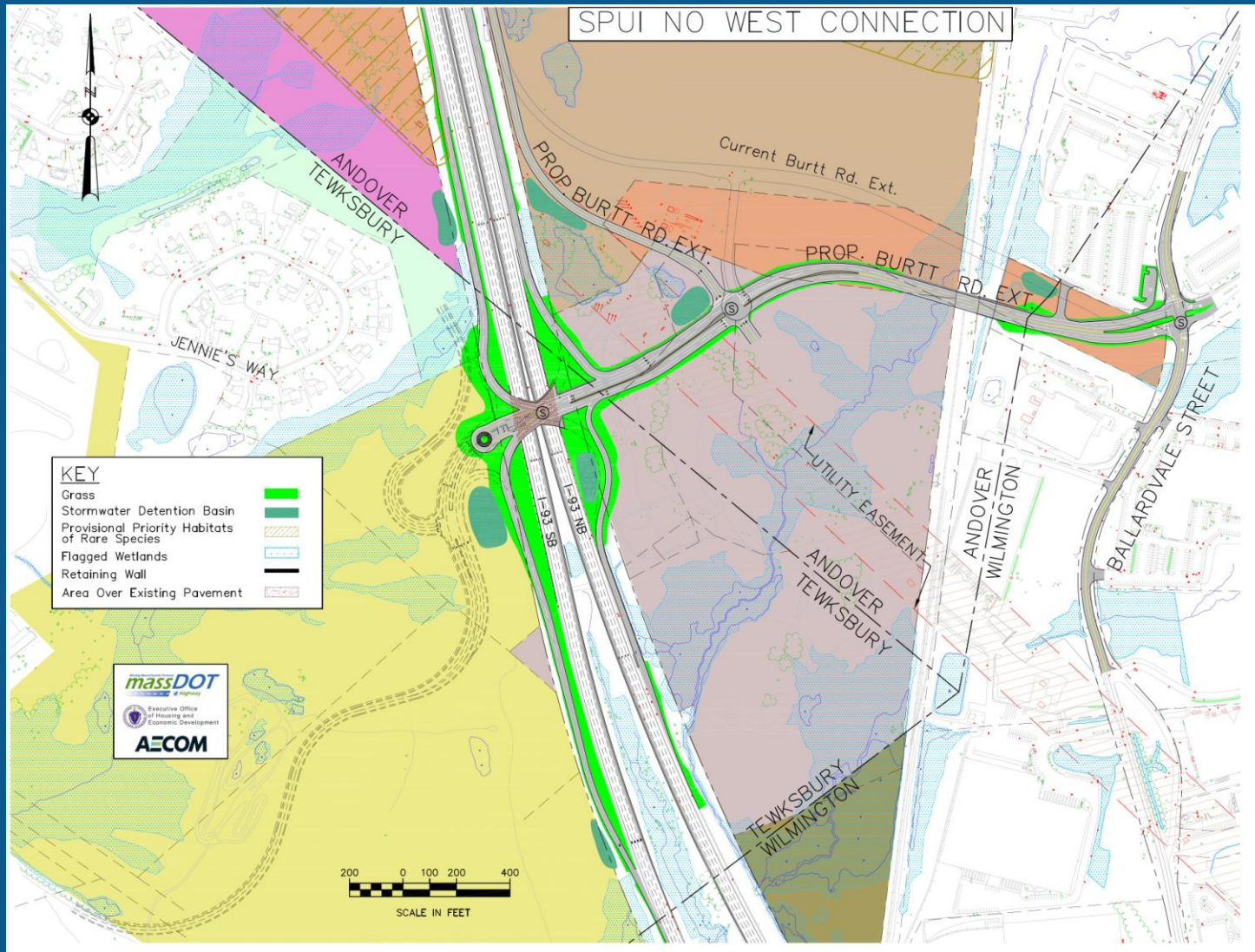
Task Force Meeting

January 14, 2010

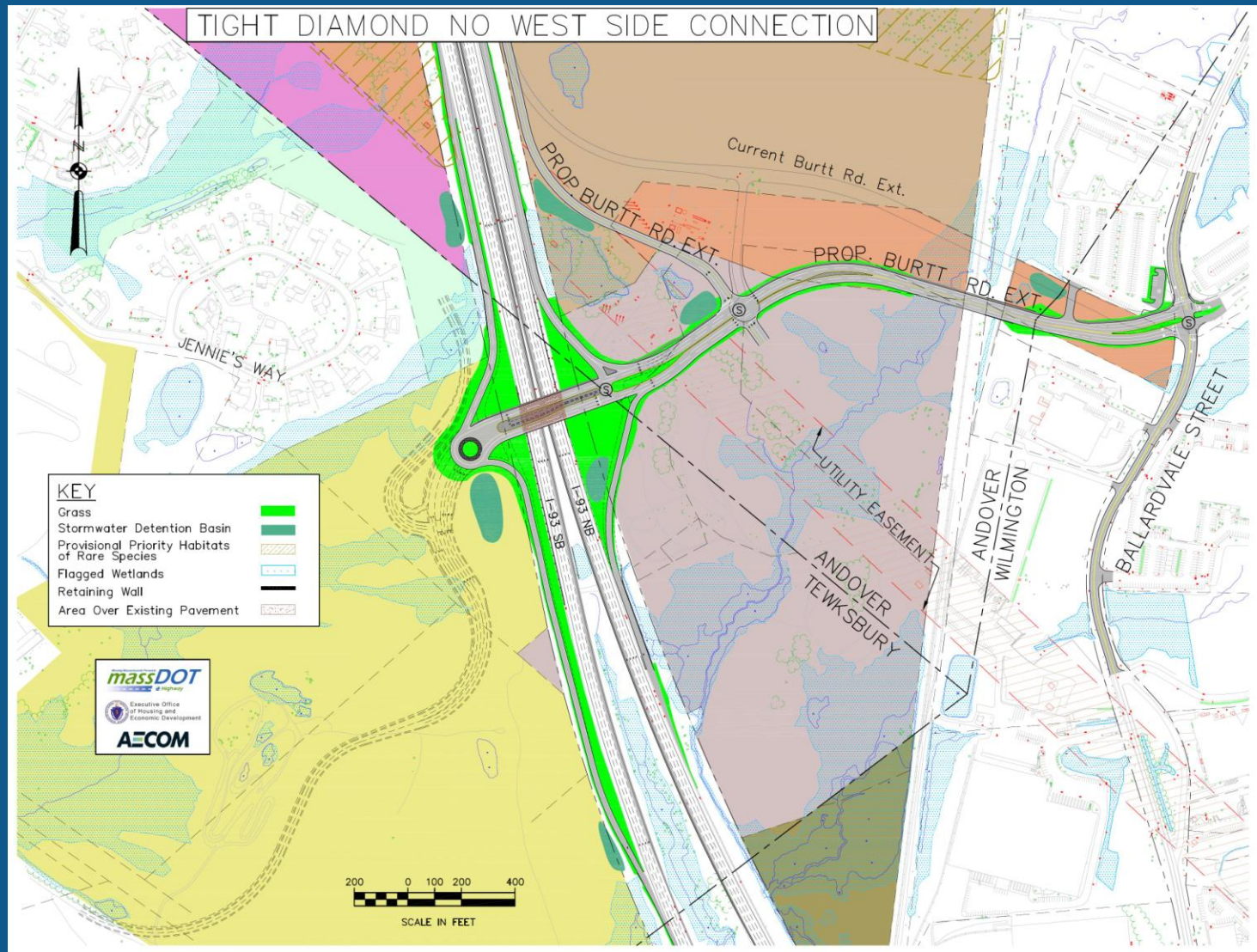
MassDOT Update

- Latest Interchange Configurations
- West Side Access Traffic and Fiscal Impact Analysis
- Schedule

Single Point Urban Interchange Concept



Tight Diamond Concept



West Side Access Traffic & Fiscal Analysis

- Required as part of NEPA/MEPA Alternatives Analysis
- Traffic analysis compares potential use of South Street with and without an interchange connection
- Fiscal impact analysis compares revenues and expenditures based upon hypothetical development allowed by underlying and overlay zoning

West Side Access Traffic Analysis

- Evaluated potential traffic impacts west of I-93 with and without new interchange
- Evaluated various land use scenarios for west side Priority Development Sites (PDS)
 - Andover PDS – Wien Property
 - Tewksbury PDS – Simon Property
 - Wilmington PDS – Simon Property

Priority Development Sites in Lowell Junction Area



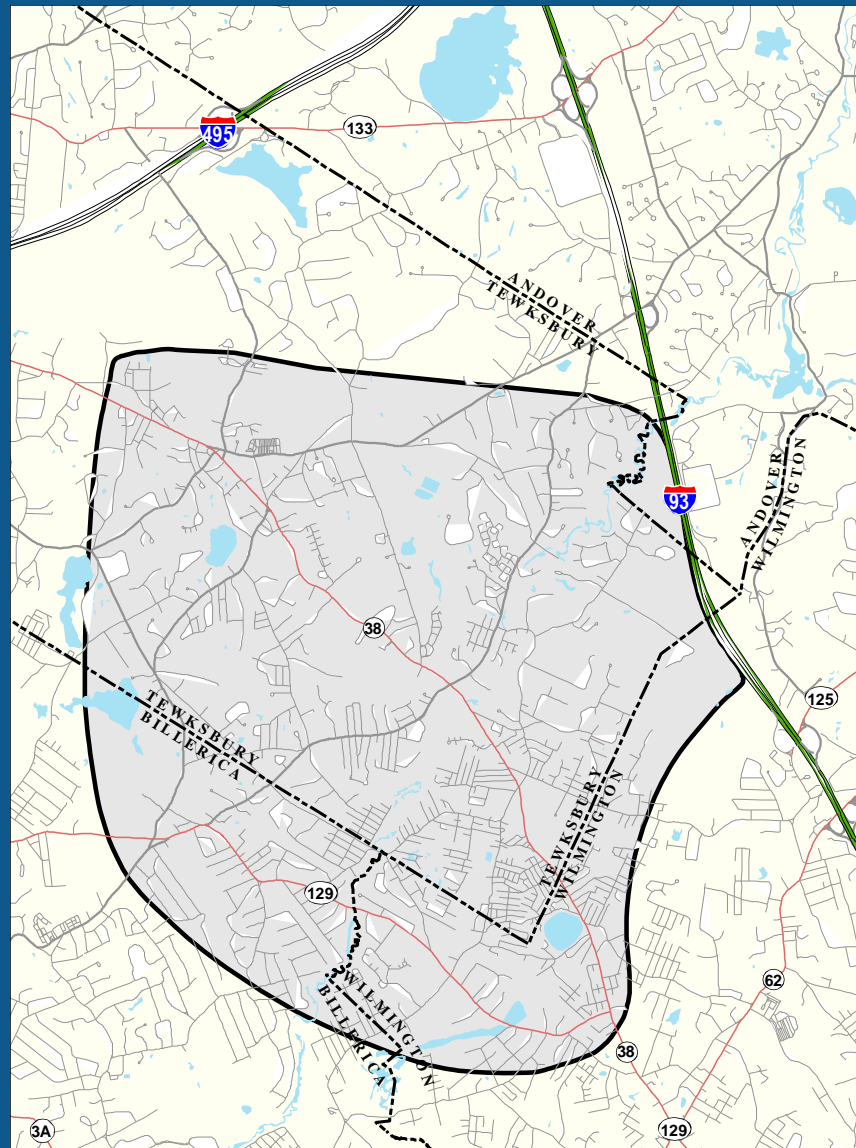
West Side Analysis Scenarios

Scenario	Description	W/ West Side Connection to South Street	W/O I/C	With I/C	Wien Property (Andover PDS)	Simon Property (Tewksbury PDS)	Simon Property (Wilmington PDS)
1	No-Build Interchange, By-Right Development	X	X		750,000 sf R & D ²	45 du SFR ³	439,008 sf Mixed Use ⁸
1A	No-Build Interchange w/40-B Residential	X	X		750,000 sf R & D ²	368 du Townhouse ⁴	439,008 sf Mixed Use ⁸
2	Mills Retail Buildout ¹	X		X	750,000 sf R & D ²	600,000 sf Retail ⁵ 112,500 sf Office 37,500 sf restaurant	439,008 sf Mixed Use ⁸
3	Mixed Use Simon - Retail ¹	X		X	750,000 sf R & D ²	420,000 sf Retail ⁶ 11 screen Movie Theater 250 du Apartments 140 room Hotel	225 room Hotel ⁶
3A	Mixed Use Simon - Industrial/R&D	X		X	750,000 sf R & D ²	750,000 sf Light Industrial ⁷	439,008 sf Mixed Use ⁸

Trip Generation and Assignment Process

- Vehicle trips were estimated for Weekday and Saturday - Daily and Peak Hour periods
- Trip generation based on rates published in the Institute of Transportation Engineers Trip Generation manual
- Vehicle trips reduced between 10-30% (based upon accepted standards) to account for internal trip making and TDM strategies
- Distribution based on Census, IJR, employee info, CTPS, and traffic data
- Vehicle trips assigned to roadways based on circulation and access patterns and travel times

West side access catchment area



Trip Generation Summary

Scenario	Weekday	AM Peak Hour	PM Peak Hour	Saturday	Saturday Midday Peak Hour
1 No-Build By-Right	9,650	1,119	1,153	4,144	399
1A No-Build 40B	10,980	1,207	1,287	5,408	499
2 Mills Retail	33,630	1,969	3,583	35,926	3,390
3 Simon Mixed-use	21,962	1,146	2,324	24,352	2,269
3A Simon Mixed use Industrial	14,090	1,805	1,925	4,448	451

Added Vehicle Trips on South Street

	AM Peak Hour			PM Peak Hour			Saturday Midday Peak Hour		
Scenario	West Side Dev't Trips	Shifted Trips with I/C	Total Trips	West Side Dev't Trips	Shifted Trips with I/C	Total Trips	West Side Dev't Trips	Shifted Trips with I/C	Total Trips
1	1,120	0	1,120	1,153	0	1,153	399	0	399
1A	1,212	0	1,212	1,287	0	1,287	499	0	499
2	112	213	325	189	300	489	168	260	428
3	67	213	280	122	300	422	111	260	371
3A	105	213	318	112	300	412	29	260	289

West Side (Tewksbury) Traffic Impact Conclusions

- Residential development with access to South Street can occur today
- Both residential scenarios will add traffic to South Street
- Traffic increases on South Street will occur whether or not an interchange is in place, including traffic from development parcels in Andover and Wilmington
- Traffic increases on South Street will be lower if a west side interchange connection to South Street is allowed, due to diversion of traffic from Andover and Wilmington parcels to the interchange

West Side (Tewksbury) Fiscal Impact Analysis

- Three hypothetical development scenarios
 - By-right underlying zoning (single family residential)
 - Chap. 40B residential (based on affordable housing deficit)
 - Overlay zoning (commercial/retail use)
- Based on available 2009 information and phone interviews with department heads
- Uses combination of average cost and marginal cost methods

West Side (Tewksbury) Fiscal Impact Analysis

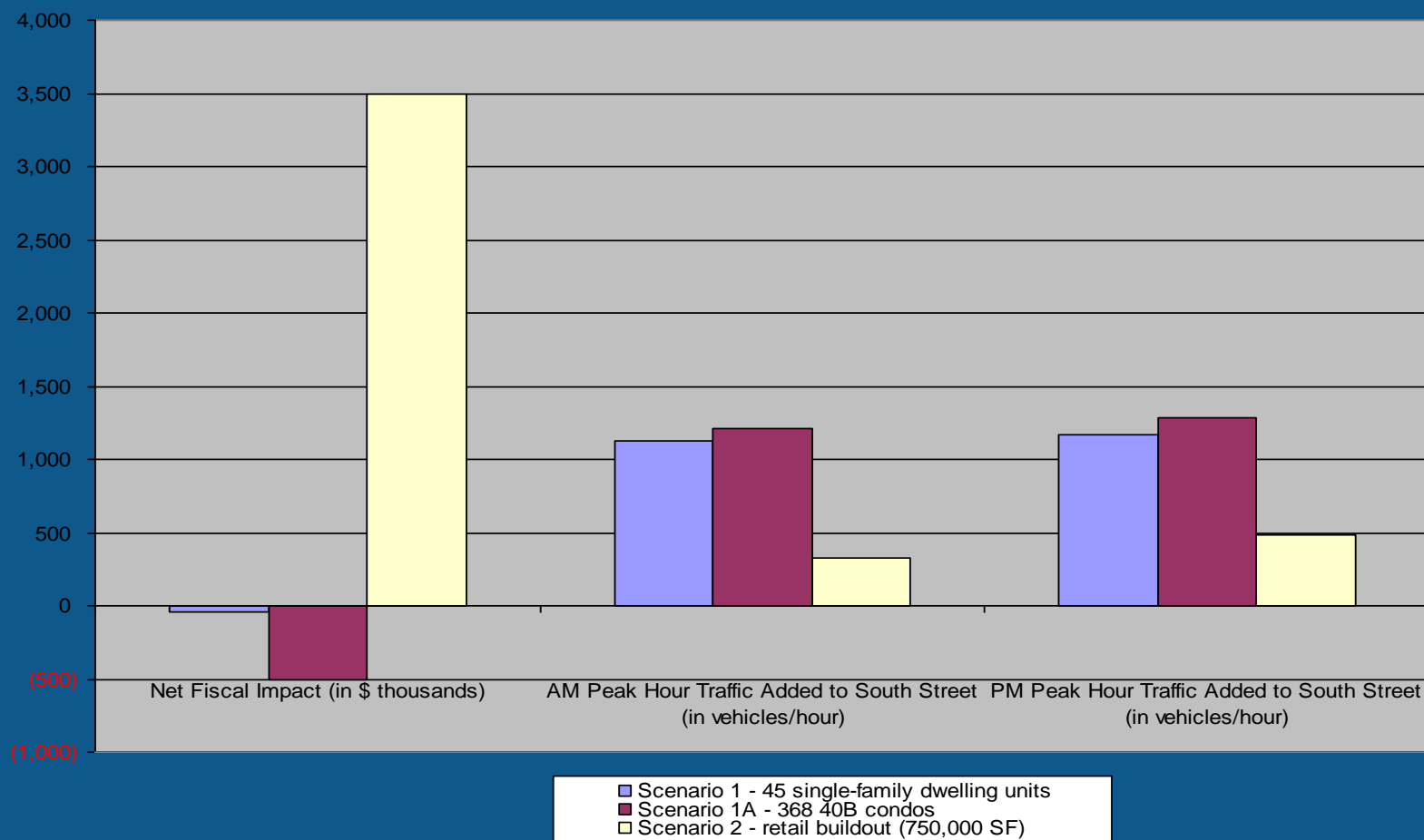
- By-right underlying zoning (single family residential)
 - will result in an annual net deficit of -\$4,000
- Chap. 40B residential (based on affordable housing deficit)
 - will result in an annual net deficit of -\$500,000
- Overlay zoning (commercial/retail use)
 - will result in an annual net benefit of +\$3,500,000

West Side (Tewksbury) Fiscal Impact Conclusions

- residential development with access to South Street can occur today
- both residential scenarios result in annual net deficit
- commercial / retail development requires highway access-only based on overlay zoning...FHWA requires local access in order to approve connection
- commercial / retail development only scenario that results in annual net benefit

West Side (Tewksbury) Traffic & Fiscal Impact Summary

Fiscal & Traffic Impacts to Tewksbury with Hypothetical Development of Parcels with Access to South Street

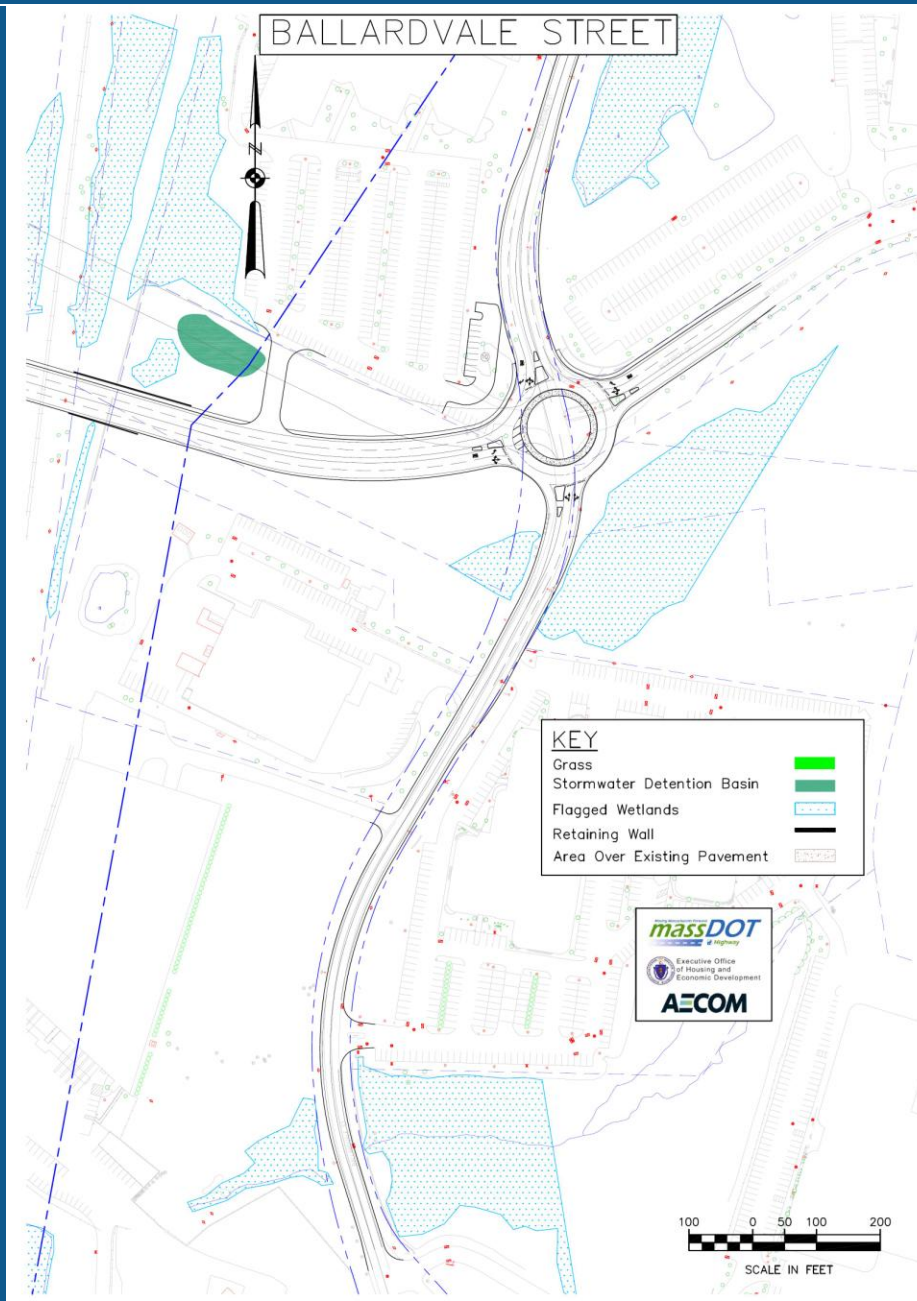


Discussion

Other Items

- 2030 Build Analysis – Capacity Constrained Approach
- Chlorides Analysis with EPA
- ANRADs
- Roundabout at Ballardvale

Roundabout at Ballardvale



Project Schedule